MODEL RVS304

REMOTE CONTROLLED SAFETY PILOT KIT

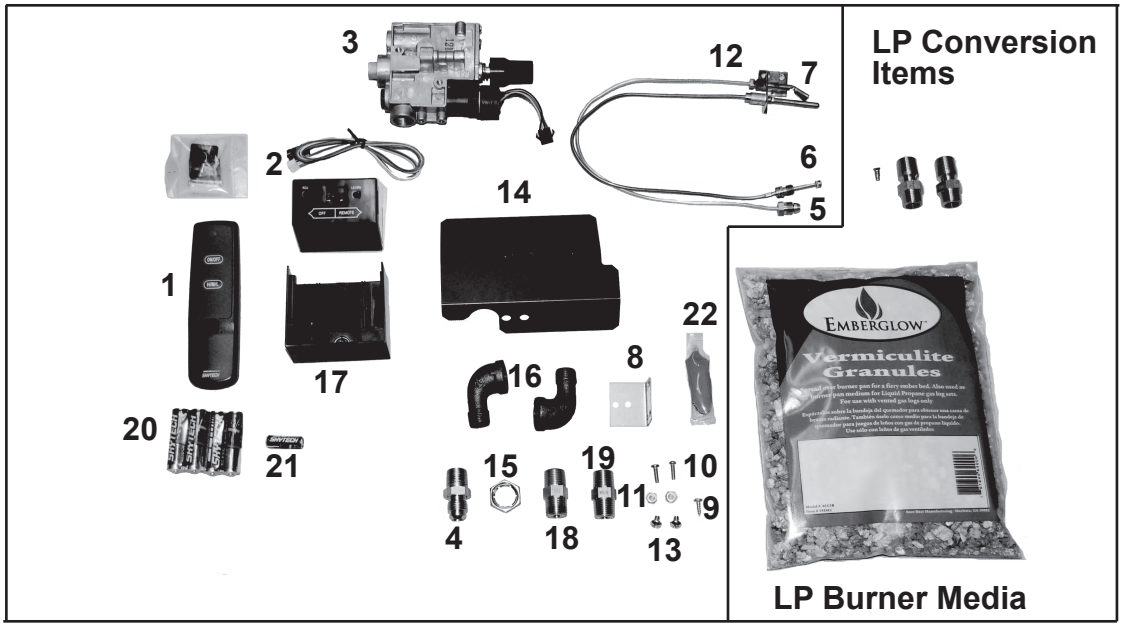
Supplemental Installation Instructions for use with Natural Gas Log Sets

NOTE: This kit is for both Natural Gas and LP Gas applications. For LP (Propane) Gas installation, see additionall LP instructions packaged with necessary hardware.

DO NOT USE THE NATURAL GAS ORIFICE SUPPLIED WITH THIS KIT ON LP (PROP ANE) GAS INSTALLATIONS! IMPROPER COMBUSTION WILL OCCUR!

IMPORTANT:

Read and follow ALL instructions carefully, as these supplemental Remote Controlled Pilot Assembly instructions are to be used in conjunction with the General Installation Instructions supplied with all Vented Natural Gas Log Sets.



Illustrated Parts List

Part No.	Description	Part No.	Description	Part No.	Description
1	Remote Transmitter	9	Sheet Metal Screw (1)	17	Heat Shield, Receiver
2	Remote Receiver & Hardware	10	Machine Screw (2)	18	18” Natural Gas Orifice (Small Center Hole)
3	Gas Control Valve	11	Nut (2)		
4	Straight Flare Fitting, 3/8”	12	Pilot Orifice Location (NG)	19	24” Natural Gas Orifice (Large Center Hole)
5	Thermocouple lead connection	13	Machine Screw 10 x 24 (2)		
6	Pilot Line Connection	14	Heat Shield	20	Battery, Receiver AA (3)
7	Pilot Burner Assembly	15	Lock Nut (3/8 NPT)	21	Battery, Transmitter 12v
8	Pilot Bracket	16	Street Elbow, 90 deg. (2)	22	Thread Sealant

National code Requirements mandate the use of a Safety Pilot Valve on all LP (Propane applications. These regulations MUST be followed on all installations of this type.

SINGLE & DUAL SYSTEMS

INSTALLATION OF NATURAL GAS PILOT VALVE

This Safety Pilot Kit contains a C.S.A Certified Control Valve, which provides a safe and convenient way to ignite and control the flame height on your energy efficient gas log set.

Note: Use pipe compound on all male threads to seal joints.

A. This Safety Pilot Kit contains a Natural Gas Orifice and L.P. Gas hardware. LP instructions are packaged separately in this kit.

B. Attach Pilot Bracket (Part #8) to the Burner Pan using one sheet metal screw (Part #9). Install sheet metal screw into top left hole of the bracket (See *Figure 1*)

C. Attach the 3/8" straight Flared Fitting (Part #4) to the “IN” position of the Gas Control Valve using pipe joint compound (See figure 5).

D. Attach Pilot Gas Supply Line (Part #6) and the Thermocouple Lead (Part #5) to the Gas Control Valve (See *Figure 2*)

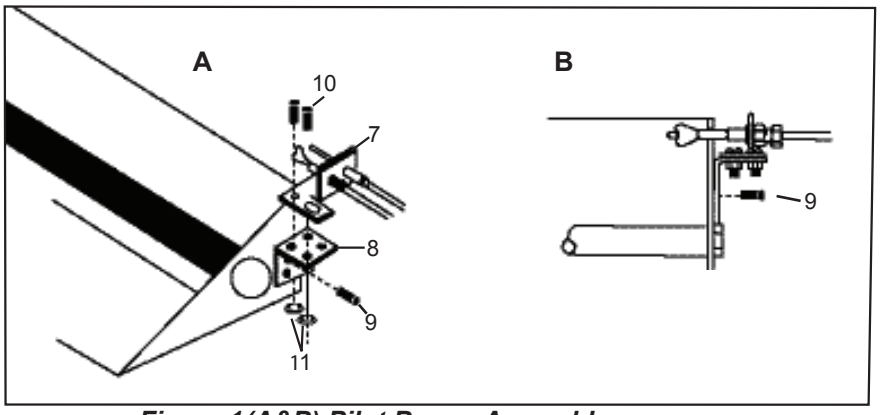


Figure 1(A&B) Pilot BurnerAssembly

NOTE: When connecting to the Control Valve, hand tighten both the Pilot Gas supply line and Thermocouple lead, then tighten 1/8 turn with a wrench. **DO NOT OVER TIGHTEN** as this may cause the Pilot to not function properly.

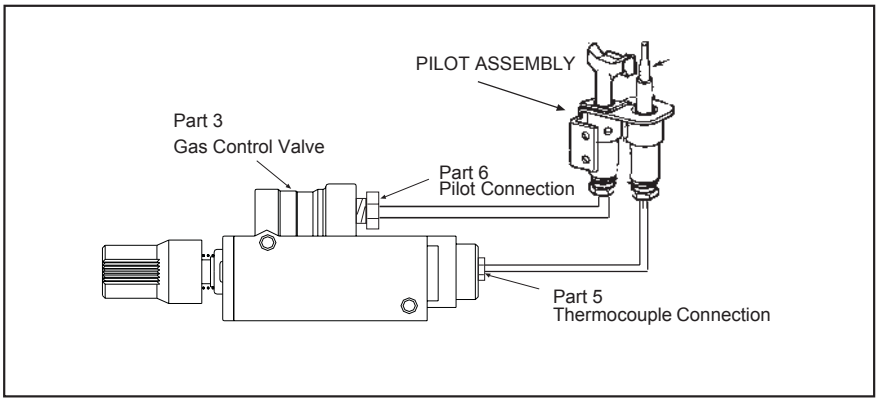


Figure 2Pilot Burner Connections

SINGLE & DUAL SYSTEMS

INSTALLATION OF NATURAL GAS PILOT VALVE (cont.)

E. Connect the two 3/8" Street Elbows (Part #16). Screw the 3/8" threads of the first elbow into the outlet of the second. Apply pipe compound to the male threads of the elbow and attach it to the control valve outlet. *(See Figure 5)*
Place the hole of the Heat Shield (Part #14) over the elbow and slide it down against the body of the elbow at the point it enters the Gas Control Valve. Line up the mounting holes with the threaded holes in the Gas Valve. Install the (2) 10 x 24 Heat Shield mounting screws (Part #13) and tighten them at this time.

F. Attach the 3/8" Natural Gas Orifice (Part #18 or #19) through the Burner Pan to the Burner Bar using the 3/8" Locknut (Part #15, only with Dual Burner logsets). When installing a single burner log set, a 3/8" locknut is not used. Be sure the small drill hole on the 3/8" Natural Gas Orifice is facing the gas control valve and the large hole is facing the burner pan.

G. Using pipe compound, connect the Street Elbow (Part #16, attached to the valve assembly) to the Burner Orifice (part #18 or #19) on the 3/8" NPT threads.

H. The valve assembly can be rotated to horizontal, and to allow it to rest on the fireplace floor. Simply rotate the entire valve assembly by turning the 3/8" Street Elbow (connected to burner orifice) with a wrench. *(See Figure 5)*

I. Attach Pilot Burner Assembly (Part #7) to the Pilot Bracket (Part #8) using the two machine screws (Part #10) and two nuts (Part #11). See Figure 1A on the previous page. Carefully bend the Pilot tubing (Part #6) when attaching the Pilot Burner Assembly to the Burner Pan. Care should be taken not to kink the tubing which would restrict gas flow to the Pilot Burner.

IMPORTANT: Be sure to turn the pilot adjustment screw with a screwdriver two full turns in a counter-clockwise direction to enable pilot operation. ***(See Figure 4)***

NOTE: The Pilot Bracket utilizes four mounting holes for adjustment of the Pilot Burner Assembly should your installation require repositioning. Repositioning of the Pilot Burner Assembly may be necessary if the log set is experiencing intermittent shutdown. Shutdown is caused by overheating of the Pilot Burner Assembly by the main burner flame. If shut down is occurring, move the Pilot Burner Assembly over to the next mounting hole so that only the tips of the Pilot Burner Assembly are hanging over the Burner Pan. Only one Mounting Screw (Part #10) will be used in this application.

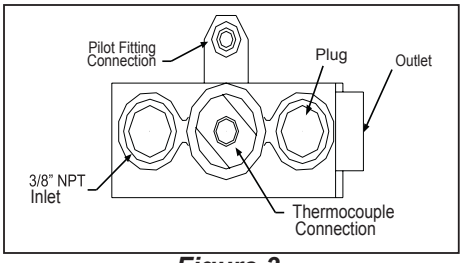


Figure 3

J. Place the assembled Burner Pan with the Gas Control Valve in the center of the fireplace.

K. Connect the 1/2" gas supply line from the fireplace to the 3/8" Straight Flared fitting (Part #4) with the 3/8" Flared Tubing supplied with the gas log set. Refer to the General Installation Instructions section titled "Connecting Gas Supply to Burner Pan" for full instructions.

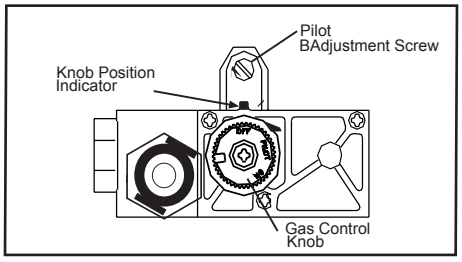


Figure 4

L. Test connections for leaks with soapy water. Retighten if necessary, and retest the connections to determine if any other leaks are present.

M. Refer the General Installation Instructions for Granule, Ember, Grate and Log placement.

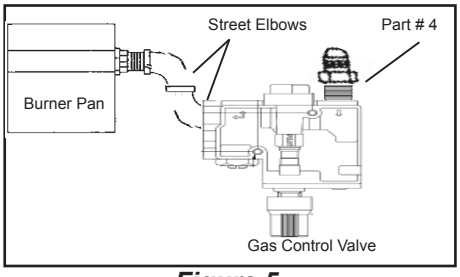


Figure 5

LIGHTING YOUR GAS LOGS WITH THE RVS304 SAFETY PILOT KIT

Turn the gas control knob counterclockwise to the PILOT position, push the gas control knob IN and hold in for about a minute. This will open the pilot valve and allows gas to flow to the pilot burner. (*See Figure 18)*

Light the pilot burner while holding the gas control knob in until a strong pilot flame is present. (Approximately 60 seconds)

Release the gas control knob. The gas control knob will hold in and engages the valve power unit.

Turn the gas control knob counter clockwise to the ON position, the main burner valve will open and the main burner will ignite.

NOTE: The Control Knob will need to be depressed slightly in order to move it from the Pilot Position to the "ON" Position.

Follow Remote Control Operating Instructions to operate the log set from the handset

NOTE: When remote controls are used, the gas control knob must be in the "ON" position.

Pilot Flame Adjustment

The Pilot Thermocouple should be engulfed by the Pilot Flame by approximately 1/2". Should the Pilot Flame become unable to heat the Thermocouple properly, you will need to adjust the Pilot. Adjust the height of the Pilot Burner flame by rotating the Pilot Adjustment Screw to the desired 1/2" flame height (*See Figure 4*).

IMPORTANT**: Be sure to turn the pilot adjustment scrɛw with a screwdriver two full turns in a counter-clockwise direction to enable pilot operation. *(See Figure 4)***

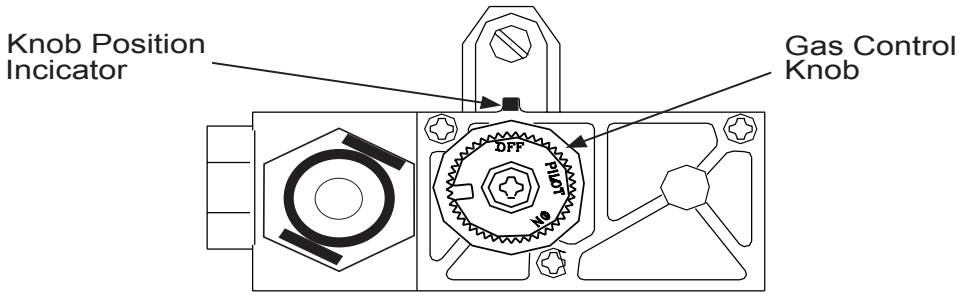


Figure 18-Rotate Control Valve Knob to "ON" Position

Shut off Procedure

1. To shut OFF the system, turn the gas control knob clockwise to the OFF position. This action will close the main gas valve and disengages the safety pilot valve. However the power unit must drop out before the lighting sequence can begin again. This may take as much as 3 minutes.
2. To relight the pilot, follow the steps in the Pilot Gas and Lighting Procedure section.

NOTE: The Control Knob will need to be depressed slightly in order to move it from the Pilot Position to the "OFF" Position.

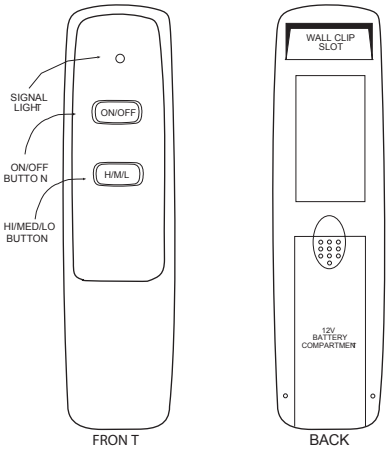
BATTERY INSTALLATION AND OPERATION INSTRUCTIONS

IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS DO NOT ATTEMPT TO INSTALL OR OPERATE

This remote control system was developed to provide safe, reliable, user-friendly remote control system for gas heating decorative appliances.

The system can be operated manually from the transmitter.

TRANSMITTER



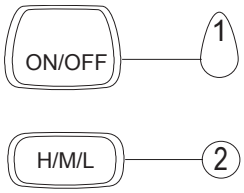
The transmitter must be used to turn on the appliance.

The transmitter operates on a 12V (A23) battery that is included. Install the 12V battery supplied with the unit into the battery compartment. It is recommended that ALKALINE batteries always be used for this product.

Be sure the batteries are installed with the (+) and (-) ends facing the correct direction.

The LED signal light should illuminate when either the **ON/OFF** or **HI/MEDIUM/LOW** button is pressed. If the signal light does not illuminate, check the position of the transmitter's battery, and if the battery is fully charged.

KEY SETTINGS



1. **ON/OFF -** This turns the appliance on or off.
2. **H/M/L -** This controls the height of the flame. It has three levels; High, Medium, and Low

IMPORTANT:

THE REMOTE RECEIVER SHOULD BE POSITIONED WHERE AMBIENT TEMPERATURES DO NOT EXCEED 130º F.

RECEIVER

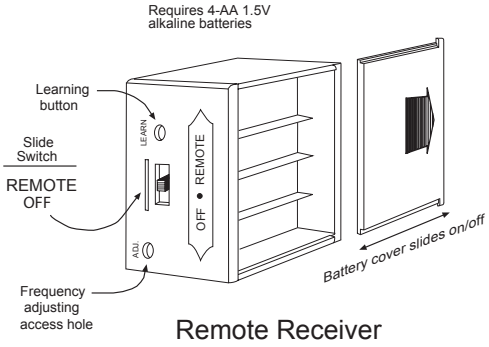
Install the (4) AA-size batteries supplied with the unit. It is recommended that ALKALINE batteries always be used for this product.

Be sure the batteries are installed with the (+) and (-) ends facing the correct direction.

The remote receiver has a 2-position slide switch for selecting the mode of operation, which is **OFF/REMOTE**

- **REMOTE**: The receiver must be in this position if you want to use the appliance, respond to the transmitter on initial use, check the battery positions in the remote. If that does not work, see the LEARNING TRANSMITTER TO RECEIVER section.
- **OFF** : will disable the remote receiver.

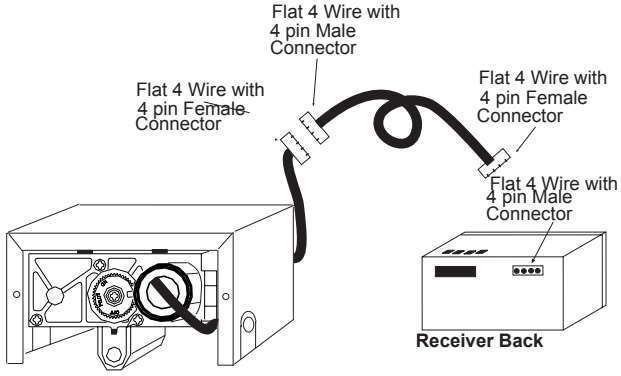
It is suggested that the slide switch be placed in the OFF position if you will be away from your home for an extended period of time to preserve battery life.



Remote Receiver

CONNECTING THE RECEIVER TO THE VALVE KIT

- Do not install the (4) AA batteries into the receiver until the DC Step Motor is connected to the receiver. The receiver will calibrate the step motor once the batteries are installed.
- Connect the 4-pin female connector from the DC step motor to the 4-pin male connector on the wire harness.
- Connect the 4-pin female connector on the wire harness to the 4-pin connector on the back of the receiver
- Install the (4) AA batteries in to the receiver.
- After receiver is connected to the DC step motor using the supplied wire harness, make sure the plastic receiver shield (Included) is located over the receiver, then locate the receiver in an area that will not exceed the 130° F. This location will always be away from the AF-LMF, towards the front of the firebox.



THERMO-SAFETY FEATURE

When the ambient temperature inside the receiver case reaches 130°F, the RECEIVER will automatically send power to the step motor on the valve to shut the fireplace system off and the RECEIVER will begin emitting a series of 4 “beeps” every 2 seconds. When the ambient temperature at the RECEIVER drops between 120° F the user can reactivate the fireplace by pushing **ON/OFF** button on the transmitter. When the ON/OFF button is pressed, the THERMISTOR “resets” itself and the fireplace will begin operating gain. However, the “beeping” will continue if the ambient temperature remains between 120° F and 130° F. This “beeping” alerts the user that the RECEIVER should be repositioned so the ambient temperature drops below 120° F. When The temperature drops below 120° F, and the control is reset by pressing the **ON/OFF** button, the “beeping” will cease.

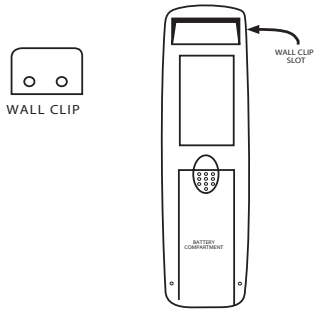
LEARNING TRANSMITTER TO RECEIVER

This transmitter has one of 256 unique security codes. It may be necessary to program the remote receiver to learn the security code of the transmitter upon initial use, if batteries are replaced, or if using a replacement transmitter.

NOTE: This receiver can hold up to 3 transmitter codes. This is for the times when a second hand held transmitter is required.

- Make sure the receiver’s slide switch is in the **REMOTE** position.
- Press and release the **LEARN** button on the receiver.
- When you hear the “Beep”, press and hold the **ON/OFF** or **H/M/L** button for about 2 seconds on the transmitter.
- You will then hear a series of beeps that indicate that your new transmitter has been accepted by the receiver.
- If you press the **LEARN** button on the receiver and you hear no beeps, the receiver is unable to retain any more transmitter codes (make sure that the transmitter and the receiver batteries are properly installed and fully charged).
- To delete all of the transmitter codes on your receiver, press and hold the **LEARN** button for 10 seconds. Then you will hear a series of beeps, indicating that the receiver’s memory has been cleared.

TRANSMITTER WALL CLIP



The transmitter can be hung on a wall using the clip provided.

- Wood - Drill 1/8'' pilot holes and install with screws provided.
- Plaster/Wallboard - Drill 1/4'' holes, tap plastic anchors in with hammer, then install with the provided screws.

BATTERY LIFE

Life expectancy of the alkaline batteries in the transmitter and receiver should be at least 12 months. Check and replace all batteries:

- Annually.
- When operating range becomes reduced.
- When transmissions are not received by the remote receiver.
- If the remote receiver batteries measure less than 5.3 volts (all four batteries in combination).
- If the hand held transmitter battery measure less than 9.0 volts.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
1. Pilot noise	Excess pressure	• Check line pressure and adjust to 7 inch water column. • Adjust pilot flame *See page 3.*
2. Pilot will not light	Inadequate gas flow	• Check all valves • Clear obstructions • Check for line kinks • Adjust pilot flame *See page 3.*
3. Pilot & Burner go out after burning for several minutes (up to one hour)	Overheating of Thermocouple	• Check to see that Main Burner Flames are not hitting the Thermocouple (move Pilot Assembly so only the tips of the Thermocouple and pilot are handing over the burner pan). • Reposition logs, if that is the cause, move Main Burner flames away from the Thermocouple.
	Thermocouple too tight, or has bad connection	• Loosen Thermocouple slightly
4. Pilot is operating but burner will not light	Gas Control Knob is not set to "ON"	• Confirm that the gas control knob is in the "ON" position.
	Low battery power in transmitter or receiver	• Check batteries, replace if needed
	Wire connections damaged or un-plugged	• Check the connections on the RED and BLACK wires from the remote receiver.

FCC REQUIREMENTS

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THE EQUIPMENT.
SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

LIMITED WARRANTY

Limited Warranty shall apply to the original purchaser at the original installation point only.

Pilot, valves and thermocouples are guaranteed for a period of one (1) year under the original manufacturers warranty.

General Warranty: This warranty does not apply in the case of improper installation, neglect, accident, misuse or as a result of modifications of the original product.

All costs for removal and re-installation are the expressed responsibility of the purchaser.

For repair, replacement, or service to defective part(s) please contact our Customer Service Hotline, number below. Thereafter with valid warranty registration and proof of purchase, call the Customer Service Hotline for authorization to ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 1861 West Oak Parkway, Marietta, GA 30062. Goods returned improperly packaged are the sole responsibility of purchaser.

It is agreed that any repair or replacement is the exclusive remedy from Sure Heat Manufacturing. In no case shall Sure Heat be liable for any consequential damage or breach of this or any other warranty expressed or implied whatsoever. This limitation as to consequential damages shall not apply in states where prohibited.

Purchased From:_____ Date:_____

Size: ☐ **18"** ☐ 24" ☐ **30"** **Model:** _____

Name:_____ Phone: (____)_____

Address:_____

City:_____ State: _____ Zip: _____

Please photocopy and return registration along with proof of purchase within 14 days of purchase to:

SHM Int. 1861 West Oak Parkway, Marietta, GA 30062

If you have other questions, please contact the Customer Service Hotline — (800) 229-5647

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